

Sub X3

WHAT IS CLAIMED IS:

1. A packaging structure of an image sensor, comprising:
 - a substrate including a plurality of metal sheets, glue for sealing the metal sheets, a first surface having a periphery, and a second surface opposite to the first surface, the metal sheets being exposed to the outside via the first surface and the second surface to form first contacts and second contacts, respectively, a projecting edge being provided on the periphery of the first surface of the substrate to form a concavity above the substrate;
 - an image sensing chip mounted on the substrate and within the concavity, a plurality of bonding pads being formed on the image sensing chip;
 - a plurality of wirings electrically connecting the bonding pads of the image sensing chip to the first contacts of the first surface of the substrate in order to electrically connect the image sensing chip to the substrate, so that electrical signals from the image sensing chip are capable of being transmitted to the second contacts of the second surface of the substrate; and
 - a transparent layer arranged on the projecting edge on the first surface of the substrate so that the image sensing chip is capable of receiving the optical signals.
2. The packaging structure of the image sensor according to claim 1, wherein the glue is selected from the group of plastic materials consisting of epoxy mold compound, BT, FR4, FR5, PPE, and the like.
- 20 3. The packaging structure of the image sensor according to claim 1,

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wherein the metal sheets are smooth.

4. The packaging structure of the image sensor according to claim 1,
wherein the bonding pads on the image sensing chip are electrically connected to
the first contacts of the substrate via the wirings by way of wire bonding.

5 5. The packaging structure of the image sensor according to claim 1,
wherein the transparent layer is a piece of transparent glass.

6. A method for packing an image sensor, comprising the steps of:

10 preparing a substrate including a plurality of metal sheets, glue for sealing
the metal sheets, a first surface having a periphery, and a second surface opposite
to the first surface, the metal sheets being exposed to the outside via the first
surface and the second surface to form first contacts and second contacts,
respectively, a projecting edge being provided on the periphery of the first surface
of the substrate to form a concavity above the substrate;

15 mounting the substrate having a plurality of bonding pads of the first surface
of the substrate and within the concavity of the first surface of the substrate;

connecting bonding pads of the image sensing chip to the first contacts of
the first surface of the substrate by the plurality of wirings; and

mounting a transparent layer on the projecting edge located on the first
surface of the substrate in order to cover the image sensing chip.

20 7. The method for packaging the image sensor according to claim 6, further

comprising the steps of:

- adhering the metal sheets onto a tape;
- sealing the metal sheets by the glue to form the substrate; and
- tearing the tape.

5 8. The method for packaging the image sensor according to claim 6,
wherein the glue is selected from the group of plastic materials consisting of
epoxy mold compound, BT, FR4, FR5, PPE, and the like.

9. The method for packaging the image sensor according to claim 6,
wherein the bonding pads on the image sensing chip are electrically connected to
10 the first contacts of the substrate via the wirings by way of wire bonding.

10. The method for packaging the image sensor according to claim 6,
wherein the transparent layer is a piece of transparent glass.

11. The method for packaging the image sensor according to claim 6,
wherein the projecting edge is adhered onto the first surface of the substrate.